

| Notice of Allowability | Application No. | Applicant(s) |
|-------------------------------|-------------------|----------------|
| | 10/628,846 | PIKE, RANDY T. |
| | Examiner | Art Unit |
| | Amanda H. Merlino | 2877 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to application filed 7/28/03.
2. The allowed claim(s) is/are 1-28.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

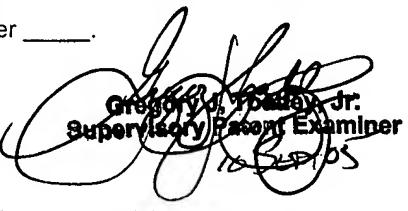
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/28/03, 9/12/03, 9/12/03, 9/28/04
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.


 Gregory V. Tolosa, Jr.
 Supervisory Patent Examiner
 1605

Allowable Subject Matter

Claims 1-28 allowed.

The following is an examiner's statement of reasons for allowance:

Wieder et al (4,102,574) teach of monitoring the quality of a fluid dielectric by measuring the intensity of light through the fluid.

As to claims 1-12, the prior of record, taken alone or in combination, fails to disclose or render obvious a method for monitoring the condition of a fluid dielectric comprising the steps of transmitting optical radiation through a portion of said fluid dielectric contained within a dielectric substrate of said RF system and measuring at least one parameter indicative of a change of transmission direction of said optical radiation caused by said fluid dielectric, in combination with the rest of the limitations of claim 1.

As to claims 13-28, the prior of record, taken alone or in combination, fails to disclose or render obvious an apparatus for monitoring the condition of a fluid dielectric comprising a light source transmitting optical radiation through a portion of said fluid dielectric contained within a dielectric substrate of said RF circuit and a sensor for measuring at least one parameter indicative of a change of transmission direction of said optical radiation caused by said fluid dielectric, in combination with the rest of the limitations of claim 13.

Information Disclosure Statement

Application numbers 10/409,261 and 10/441,743 in the information disclosure statement filed 9/10/03 has a line drawn across them because they were duplicates. It was already cited in the IDS filed 9/8/03.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

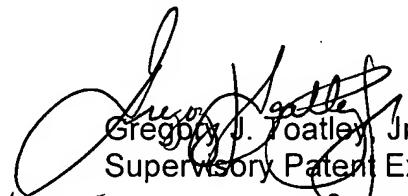
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda H Merlino whose telephone number is 571-272-2421. The examiner can normally be reached on Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J Toatley, Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amanda H Merlino *ahm*
Patent Examiner
Art Unit 2877
September 16, 2005



Gregory J. Boatley, Jr.
Supervisory Patent Examiner
16 Sept 05